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IN THE CLAIMS

Amended claims follow:

1. -3. (Cancelled)

4. (Previously Amended) An Internet device for communicating with an Internet server by an Internet client, said Internet device comprising:

a command processor that accepts a command line interface;

a TCP/IP stack that can be opened and closed, send and receive data;

a streaming socket that can be attached to an open socket of said TCP/IP stack; and

a plurality of Internet specific configuration elements to configure said command line interface;

wherein said Internet device communicates with said Internet client through a serial port and said Internet device communicates with said Internet server over any of a phone system, wireless/cell/ mobile phone, data network, or local area network;

wherein said Internet device can be operated in any of the following modes:

command mode that accepts standard modem AT commands;

data mode that passes input bytes to a connected remote Internet device;

Internet session command mode that accepts said command line interface; and

Internet session streaming socket mode that transmits data to and from said Internet server;

wherein said command line interface uses a command line starting with an Internet ready code, followed by an Internet ready command, and terminated by a carriage-return character; and

wherein a result code from executing said command line can be words or numeric characters;

wherein said Internet ready command is selected from a group consisting of:

a first command that checks whether said Internet device is Internet ready enabled;

a second command that starts device connection and negotiates PPP;

a third command that starts device termination and terminates PPP;

a fourth command that starts device connection to said Internet server through TCP socket and transitions said Internet device to Internet session streaming socket mode;

a fifth command that resumes Internet session streaming socket mode with a socket that has been connected through said T command that starts device connection to said Internet server;

a sixth command that closes a socket and releases the resources allocated to the socket;

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a seventh command that sets up a socket resource to allow UDP communications;

an eighth command that returns a UDP datagram from a UDP socket that has been set up;

a ninth command that sends a UDP datagram containing desired data;

a tenth command that sets and shows said Internet specific configuration elements of said Internet device; and

an eleventh command that disables the Internet ready commands processing.

5. - 6. (Cancelled)

7. (Previously Amended) An Internet device for communicating with an Internet server by an Internet client, said Internet device comprising:

a command processor that accepts a command line interface;

a TCP/IP stack that can be opened and closed, send and receive data;

a streaming socket that can be attached to an open socket of said TCP/IP stack; and

a plurality of Internet specific configuration elements to configure said command line interface;

wherein said Internet device communicates with said Internet client through a serial port and said Internet device communicates with said Internet server over any of a phone system, wireless/cell/ mobile phone, data network, or local area network;

wherein said Internet specific configuration elements comprise:

a first and a second read-only S-Register, each of which contains a 3-character string that represents a current operating status of physical sockets in said Internet device;

a third and a fourth read-only S-Register, each of which contains a source port of physical sockets in said Internet device;

a fifth S-Register that contains an IP address of said Internet device, said IP address is statically assigned;

a sixth S-Register that contains an IP address of a primary domain name server;

a seventh S-Register that contains an ASCII Hex byte storing the configuration of Internet ready command interface;

an eighth S-Register that contains TCP Stream tick time used to determine when to send TCP segments; and

a ninth S-Register that can store AT and IR commands so that said commands can be sent to the Internet device and be executed.

8. (Original) The Internet device of claim 7, wherein said fourth S-Register contains a valid

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IP address established during PPP negotiation.

9. (Original) A method of communicating to an Internet server from an Internet client through an Internet device accepting a command line interface, comprising the steps of:
checking whether said Internet device supports said command line interface;
dialing said Internet device to a destination number to switch said Internet device to data mode;
escaping said Internet device from data mode to command mode;
connecting to POP and negotiating a PPP connection and switching said Internet device to Internet session command mode;
connecting to said Internet server and establishing a TCP socket connection for a streaming socket;
performing necessary Internet transactions between said Internet client and said Internet server;
escaping said Internet device from Internet streaming socket mode to Internet session command mode;
releasing said socket connection;
terminating said socket connection; and
hanging up said Internet device using standard modem command.

10. (Original) The method of claim 9, wherein said command line interface uses a command line starting with an Internet ready code, followed by an Internet ready command, and terminated by a carriage-return character, and
wherein a result code from executing said command line can be words or numeric characters.

11. (Original) The method of claim 10, wherein said Internet ready command is selected from a group consisting of:
a first command that checks whether said Internet device is Internet ready enabled;
a second command that starts device connection and negotiates PPP;
a third command that starts device termination and terminates PPP;
a fourth command that starts device connection to said Internet server through TCP socket and transitions said Internet device to Internet session streaming socket mode;
a fifth command that resumes Internet session streaming socket mode with a socket that has been connected through said T command that starts device connection to said Internet server;

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a sixth command that closes a socket and releases the resource that has been allocated to said socket;

a seventh command that sets up a socket resource to allow UDP communications;

an eighth command that returns a UDP datagram from a socket that has been set up;

a ninth command that sends a UDP datagram containing desired data; and

a tenth command that sets and shows said Internet specific configuration elements of said Internet device; and

an eleventh command that disables the Internet ready commands processing.

12. (Original) The method of claim 10, wherein said result code of Internet ready commands can be set using a standard modem "ATV" command.

13. (Original) The method of claim 10, wherein said Internet ready code is "IR".

14. (Original) The method of claim 9 wherein Password Authentication Protocol is used in the step of negotiating PPP.

15. (Original) The method of claim 9, wherein while escaping to Internet session command mode further comprising

connecting to a second Internet server and establishing a second TCP socket connection for a second socket; and

performing necessary Internet transactions between said Internet client and said second Internet server over second socket.

16. (Original) The method of claim 9, wherein said streaming socket contains a send buffer and a streaming socket timer counter and said streaming socket performs state transition steps comprising

starting streaming socket at an idle state;

when connecting TCP socket to Streaming socket, resetting streaming socket timer counter and streaming socket send buffer to zero;

becoming connected mode by said streaming socket;

when escaping from streaming socket mode to idle state, forcing send buffer out TCP socket;

when said Internet client sending character, placing received character into streaming socket send buffer and resetting the streaming socket timer counter;

if send buffer is not full, keeping the received characters in streaming socket send buffer;

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if send buffer is full, forcing send buffer out TCP socket;

if streaming socket send buffer has data, forcing out TCP socket and resetting streaming socket timer counter; and

when TCP segment is received on the streaming socket from said Internet server, sending data to said Internet client.

17. (Original) The method of claim 16, wherein said streaming socket timer is between 1 millisecond and 5 seconds.

18. (Original) The method of claim 9, wherein said Internet server is an HTTP server and the step of performing necessary Internet transactions between said Internet client and said Internet server comprises the sub-steps of:

performing a GET to a CGI program running on said HTTP server by said Internet client;

sending parameter data to said CGI program by said Internet client;

parsing said parameter data and saving it to said HTTP server by said CGI program; and

returning data from said CGI program to said Internet client.

19. (Original) The method of claim 10, wherein said Internet server is an SMTP server and wherein the step of performing necessary Internet transactions between said Internet client and said Internet server comprises the sub-steps of:

entering a return email address by said Internet client; entering one or more target email addresses by said Internet client; and

sending data to said SMTP server by said Internet client.

20. – 21. (Cancelled)